## DEPARTMENT OF THE INTERIOR UNITED STATES GEOLOGICAL SURVEY

## **OPEN-FILE REPORT** 78-1096 SHEET 2 OF 2

## DESCRIPTION OF MAP UNITS

Sedimentary deposits, mainly alluvium; locally includes colluvium Basalt flows, with subordinate basaltic volcaniclastic rocks Dikes and plugs, mainly basaltic Sedimentary deposits, mainly gravel Basalt flows, with subordinate basaltic volcaniclastic rocks QTi Dikes and plugs, basaltic to rhyolitic Conglomerate, with subordinate volcanic rocks Age designation after Eberly and Stanley (1978) Fanglomerate, with subordinate volcanic rocks Conglomerate, breccia, and sandstone, with minor interbedded tuffaceous sandstone and basaltic to rhyolitic volcanic flows Silicic volcanic rocks; in eastern part of quadangle includes rhyolitic to dacitic lava flows and ash-flow Tvi Intermediate volcanic rocks; in eastern part of quadrangle includes andesitic lava flows and breccia Basalt flows, with subordinate basaltic volcaniclastic rocks; probably includes some basaltic andesite Ti Hypabyssal intrusive rocks and volcanic plugs; rhyolitic to basaltic Volcanic rocks; silicic to intermediate; includes some intrusive rocks and minor sedimentary rocks TKv Granitic rocks: granite to diorite; includes some related porphyries Granitic rocks characterized by accessory muscovite and (or) garnet TKi Intrusive porphyries, silicic and intermediate Sedimentary rocks, chiefly sandstone and conglomerate Volcanic rocks, silicic to mafic Probably in part of Chiefly andesite Paleogene age Intercalated sedimentary rocks and rhyolitic to andesitic volcanic rocks Schist, phyllite, semi-schist, and quartzite; in eastern part of quadrangle derived from Mesozoic sedimentary and volcanic rocks (Briskey and others, 1978). May include rocks equivalent to or related to the Orocopia Schist (Haxel and Dillon, 1978) Gneiss; age of protolith uncertain. Probably includes some banded gneiss of probable Precambrian age and some orthogneiss of probable Paleogene age equivalent to unit TKgm Granitic rocks: granitic to dioritic; includes some related porphyries. In eastern part of the quadrangle probably mostly Jurassic (Haxel and others, 1978). In western part of quadrangle may include granitic rocks ranging in age from Precambrian X to Miocene

Sedimentary rocks, chiefly sandstone, siltstone, and conglomerate, and silicic and intermediate volcanic

Limestone, dolomite, and sandstone. Cambrian, Devonian, Mississippian, and Pennsylvanian formations exist

Limestone, sandstone, and siltstone of Apache Group (Shride, 1967); includes Precambrian Y (Silver, 1960)

Quartz monzonite, correlated, on lithologic grounds, with the Oracle Granite (Peterson, 1938; Livingston and

Gneiss and schist, in part of uncertain age and protolith; may include some Mesozoic metamorphic rocks;

Granitic rocks and orthogneiss, in part of uncertain age; may include some Mesozoic or Tertiary granitic

diabase intrusive into the Apache Group

Damon, 1968; Silver, 1968)

rocks

Yg

Xsc

[Numbers refer to index map]

rocks; in part gradational into Mesozoic metamorphic rocks (Mzsc).

in the eastern part of the quadrangle (Dockter and Keith, 1978)

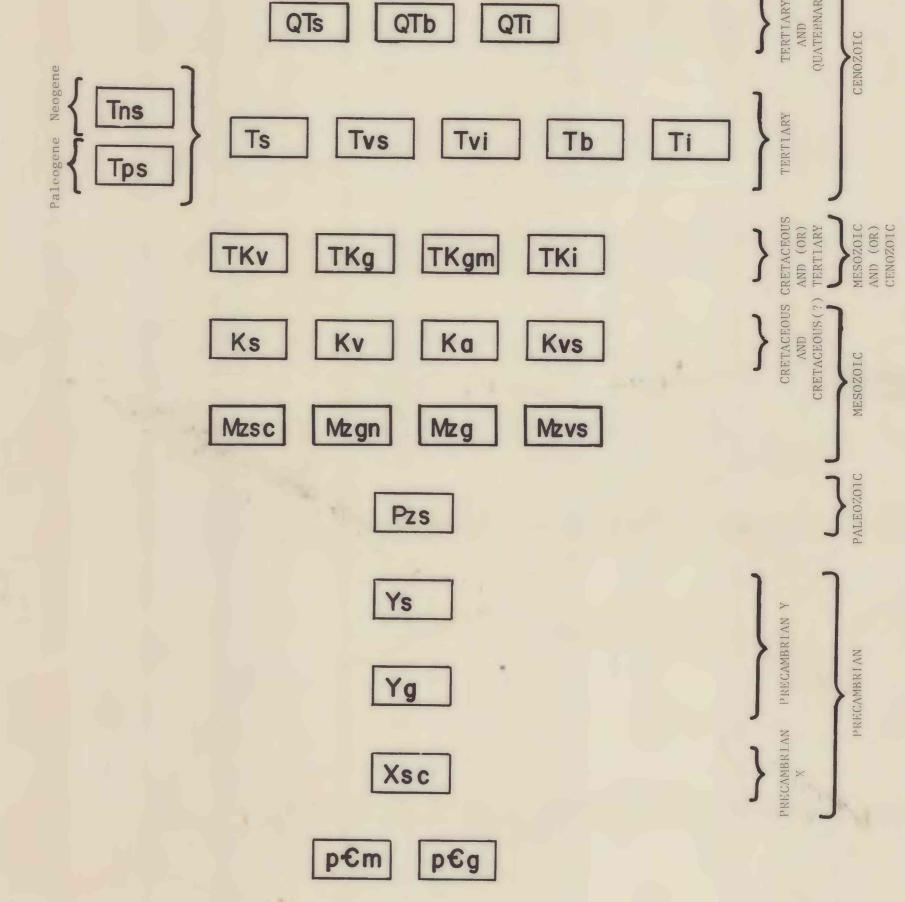
Pinal Schist: chiefly quartz-mica schist and quartzofeldspathic schist

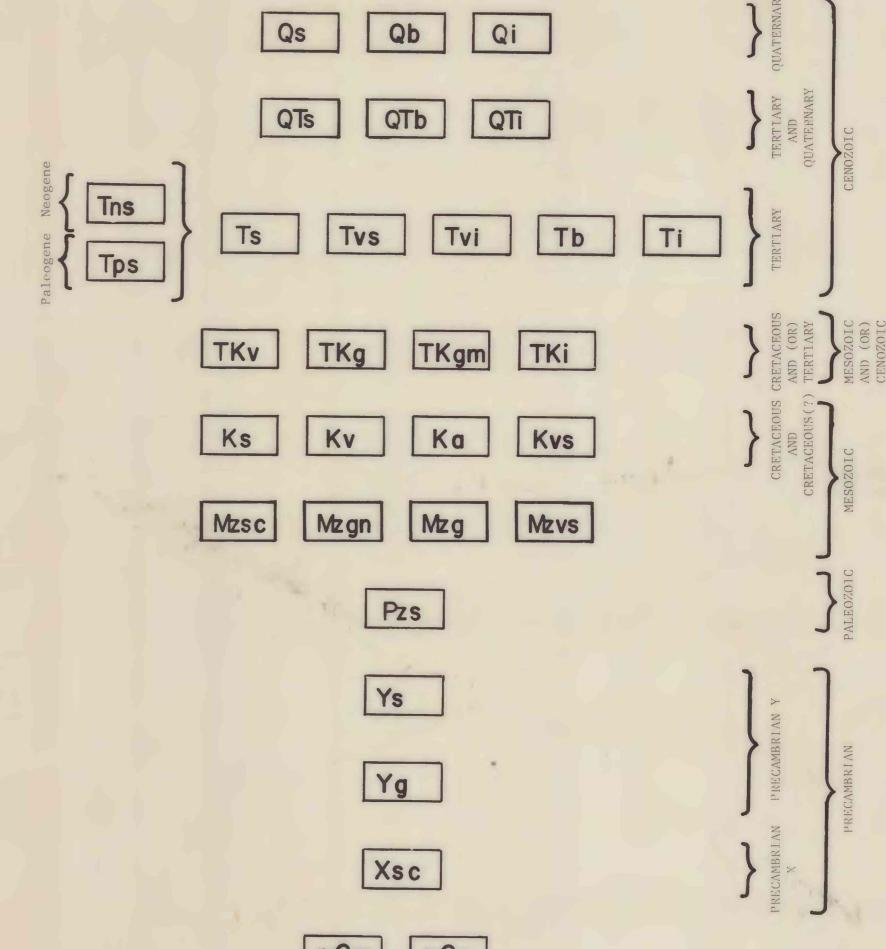
includes some areas of undivided metamorphic and granitic rocks

(3) Briskey, J. A., Haxel, G., Peterson, J. A., and Theodore, T. G., 1978, Reconnaissance geologic map of the Gu Achi quadrangle, Pima County, Arizona: U.S. Geological Survey Miscellaneous Field Studies Map MF-965, scale 1:62,500.

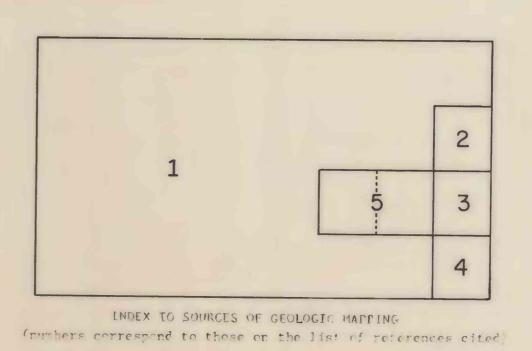
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- (1) Wilson, E. D., Moore, R. T., and Cooper, J. R., 1969, Geologic map of Arizona: Arizona Bureau of Mines and U.S. Geological Survey, scale 1:500,000.





CORRELATION OF MAP UNITS



This report is preliminary and has not been edited or reviewed for conformity with Geological Survey

PRELIMINARY GEOLOGIC MAP OF THE AJO 1° BY 2° QUADRANGLE, ARIZONA by

> Katherine Kahle, Dyan Conway, and Gordon Haxel 1978